

# The design of Cyrillic-Latin converter for Tatar language

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## Abstract

The relevance of the study is conditioned by the need of computer program development which allow to transliterate texts from Cyrillic graphics during the operation in non-Russian systems. During transliteration a text written with the use of a particular alphabet, is presented by the alphabet of another system. The correspondence of only two alphabet letters is usually taken into account. However, during the transliteration of living languages they try to take into account the sound aspect in order not to detach a word from its live-sounding form. Thus, they transliterate not an alphabet, but the graphics adopted in this language system. Modern Tatar language has Cyrillic graphics. In this regard, the article shows the process of software development, which allows you to convert a text written in Tatar language using Cyrillic symbols into the Latin symbols. The principle of conversion is proposed, based on etymology. Original Tatar words are proposed to convert according to phonetic principle, and the borrowed words are proposed to convert according to transliteration rules. In order to determine the origin of a Tatar word it is proposed to use the following algorithms: digram analysis, combined analysis and search. An algorithmic model of conversion was developed. The software designed by the authors allows to transliterate native Tatar words nowadays.

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## Keywords

Converter, Cyrillic, Latin, Russian, Tatar, Transliteration